

USP HPLC Method Details – Pain Killers

| Analyte | Mobile Phase | System Suitability | UV nm | Column |
|--------------------|---|---------------------------------------|-------|-----------|
| Morphine Sulfate | Water, methanol (~70:30)+heptanesulfonate+GAC | phenol | 284 | L1, 30cm |
| Fentanyl | GRADIENT: (A) triethylamine (aq) pH2.62 w/perchloric acid (B) ACN | Fentanyl Realted Cmpnds A, B, D, G, E | 206 | L7, 15cm |
| Lorazepam* | ACN(aq) + GAC | RSDs, tailing... | 230 | L1, 25cm |
| Midazolam (versed) | ACN (aq) + ammonium acetate, 5.5pH | Col. Effic., tailing & RSD | 254 | L60, 25cm |

*Note: requires sample compartment chiller, 4°C; column chiller, 5°C; multiple related compounds – A, B, C, D & E

Other Notes:

- Only the Morphine Sulfate HPLC analysis has been performed prior.
- Only the Agilent Series 1100 HPLC system has autosampler cooling capability; column compartment may not meet requirement.
- Need to purchase an L60-type column.